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I - G01L9/00 ;G01F1/20 ;G01F1/38 ;G01L7/00

PN - JP9072803 A 19970318

TI - VARYING PRESSURE SENSOR

AB - PROBLEM TO BE SOLVED: To obtain a varying pressure sensor having simple structure requiring no power supply at the sensor section nor any auxiliary circuit of amplifier, AD converter, or the like.

- SOLUTION: A membrane 62 made of a material having high magnetic permeability is stretched in the central part of a container 61 and a permanent magnet 63 is disposed to hold the membrane 62 between two poles thereof. The air chambers 68, 69 in the container 61 partitioned by the membrane 62 are coupled through pressure introduction pipes 51, 52 with the pressure introduction hole of a fluidic element. Fluidic oscillation of the fluidic element generates a pressure difference between the pressure introduction pipes 51, 52 for oscillating the membrane 62 to cause variation of magnetic field in the vicinity thereof. A magnetic sensor 65 disposed in the vicinity of membrane 62 detects the variation of magnetic field and outputs a high voltage pulse produced through large Barkhausen effect. A fluidic oscillation frequency is determined by counting the voltage pulses and expressed in terms of flow rate.

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IN - NUKUI KAZUMITSU,SAKAI KATSUTOKATO HIDEO;SATO SOUBUN;SATO SHINICHI

ABD - 19970731

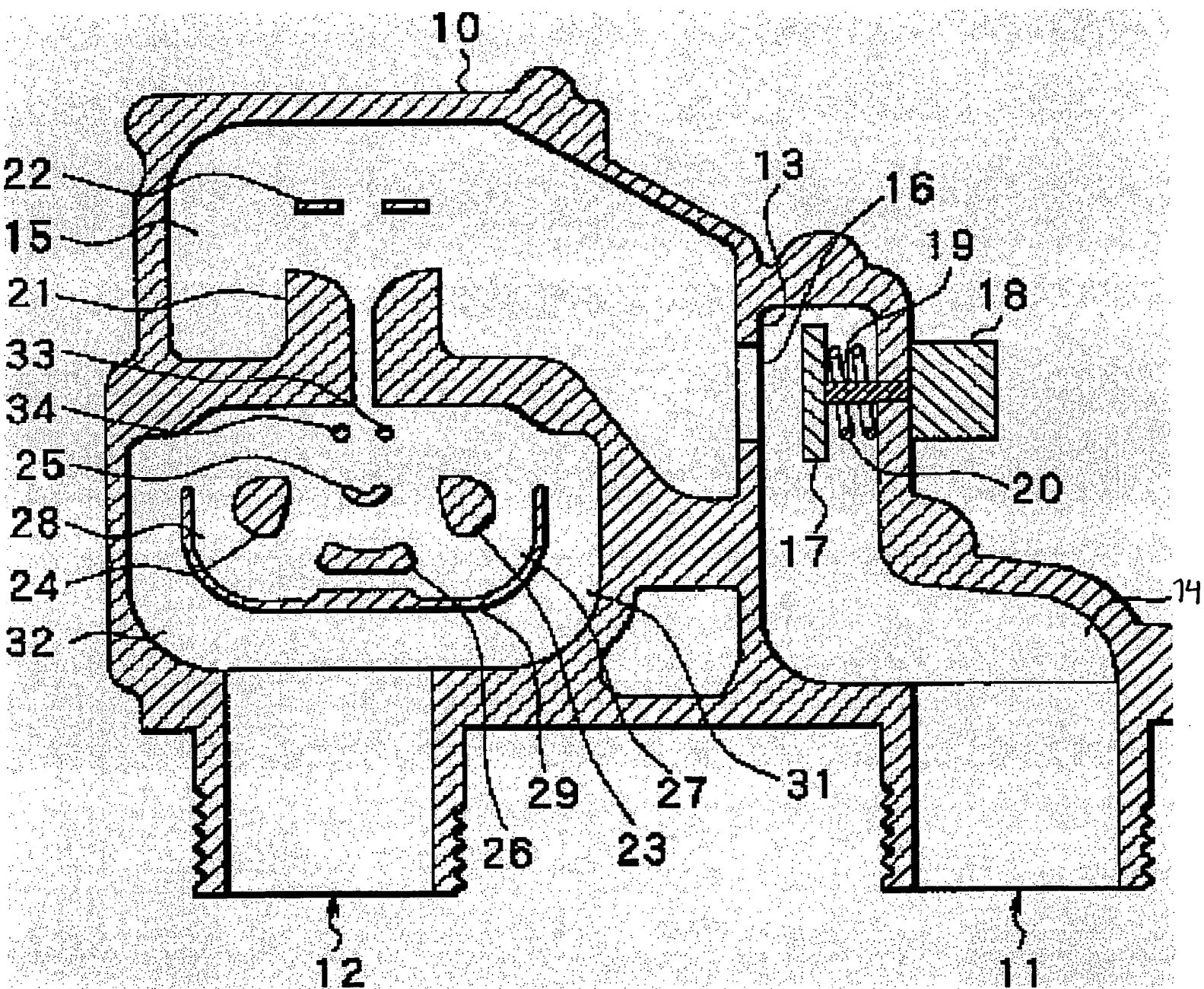
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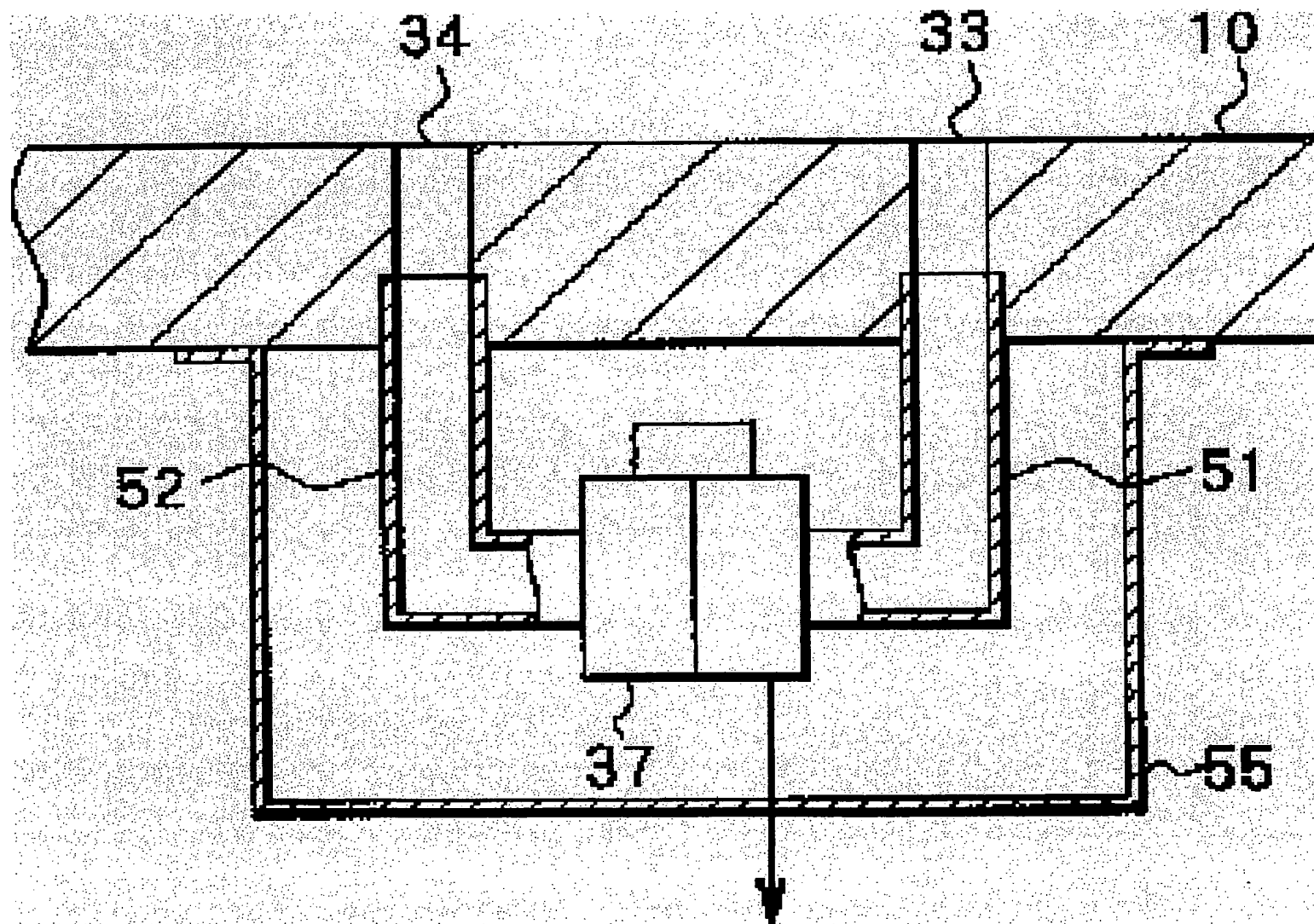
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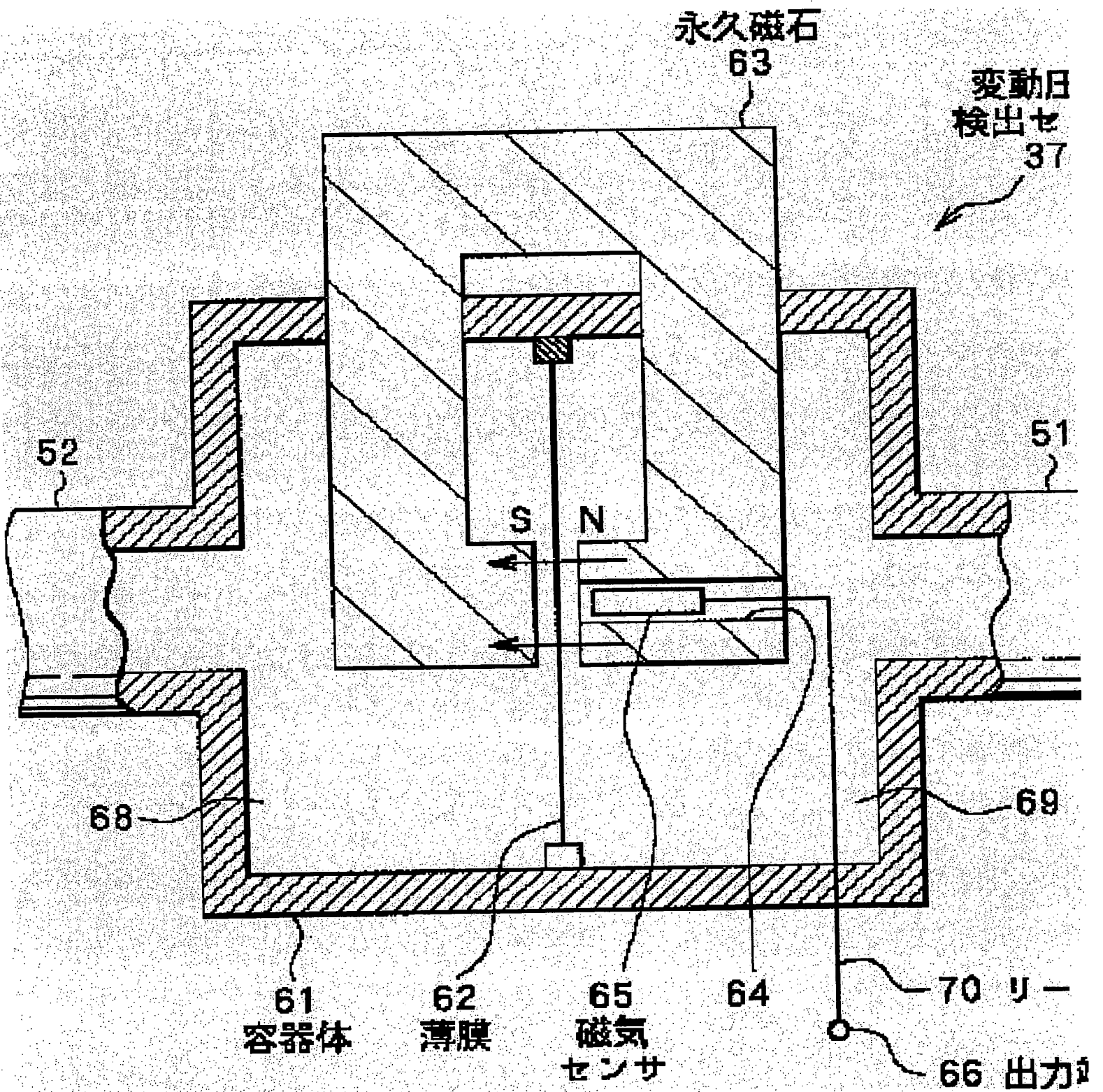


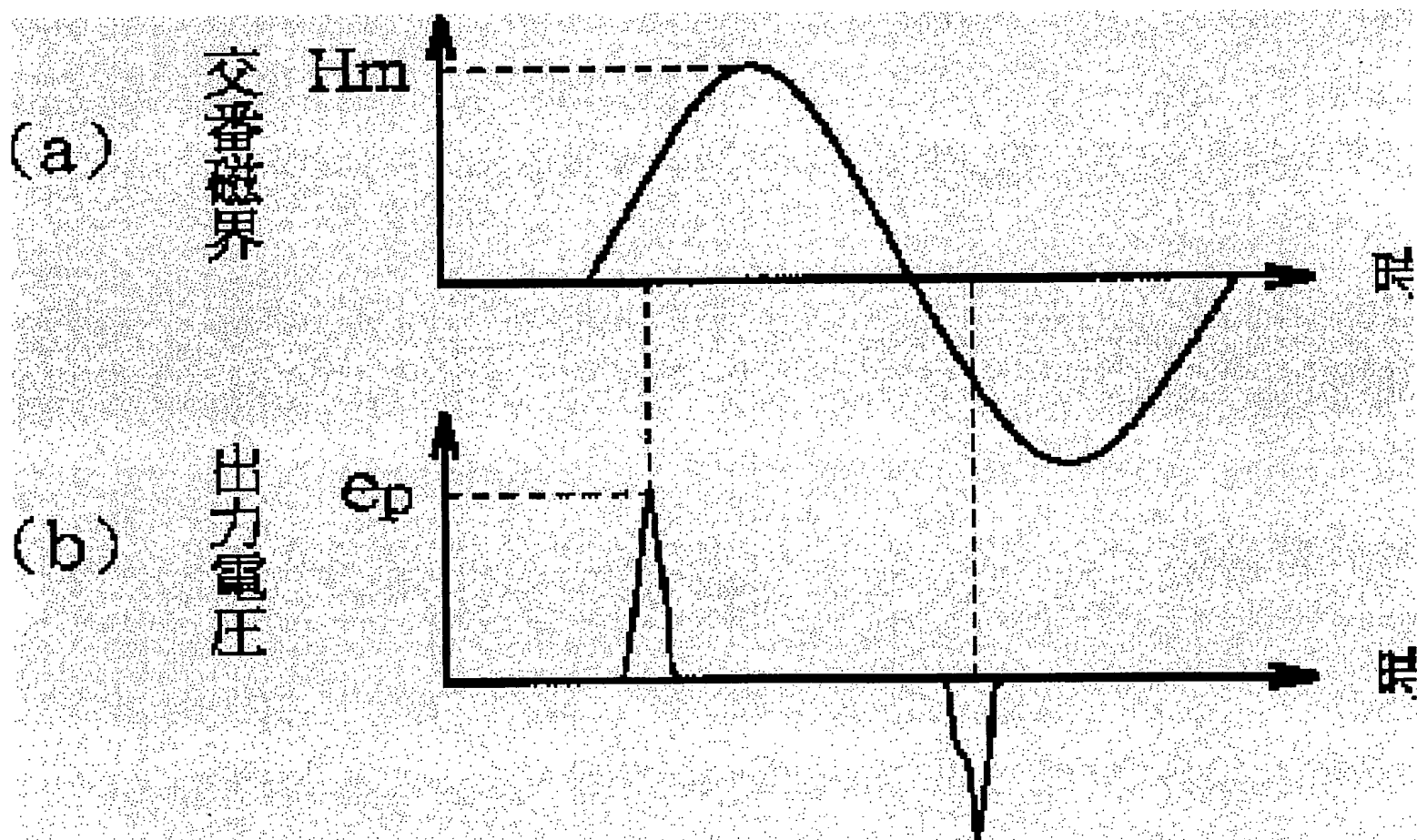


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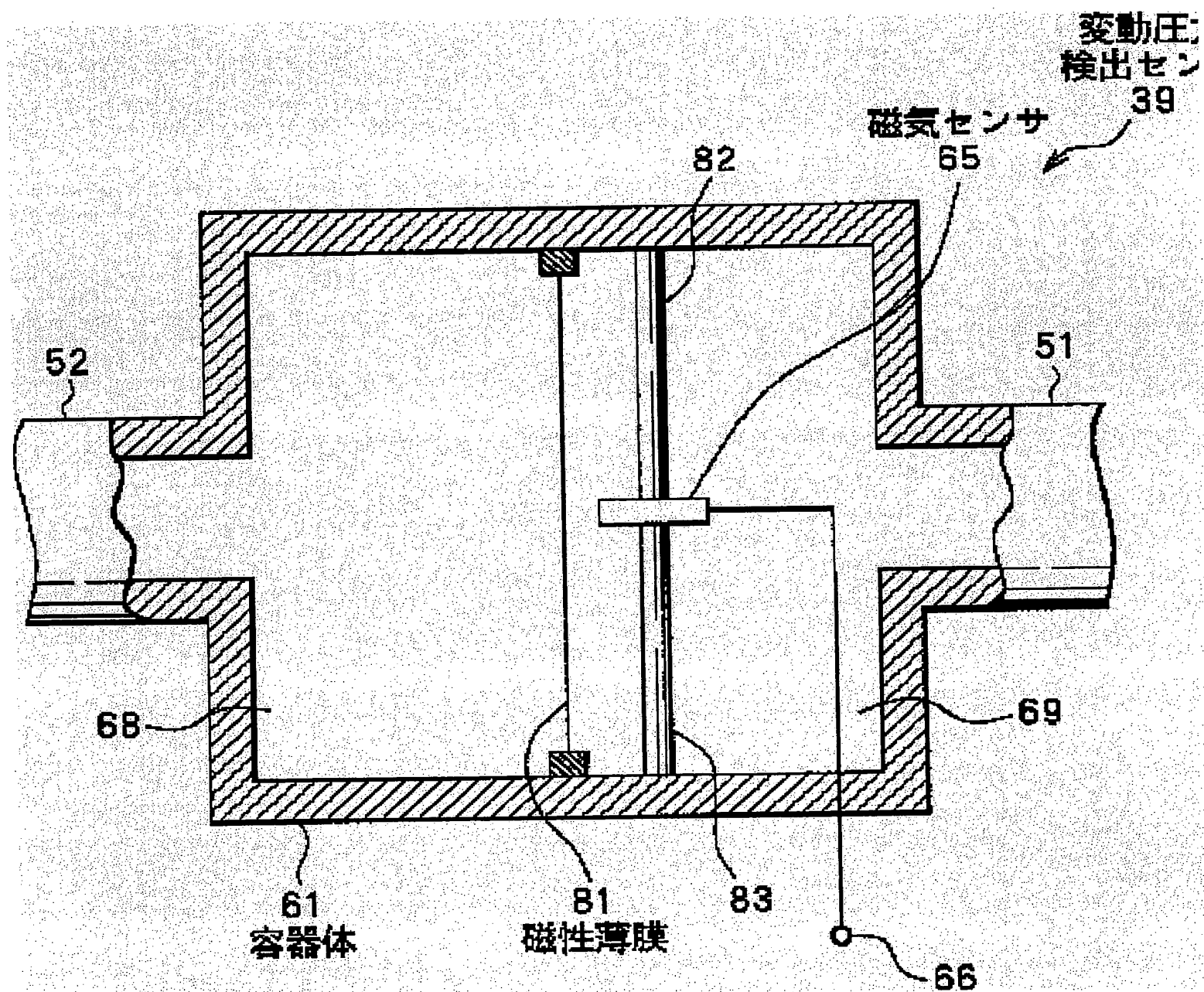


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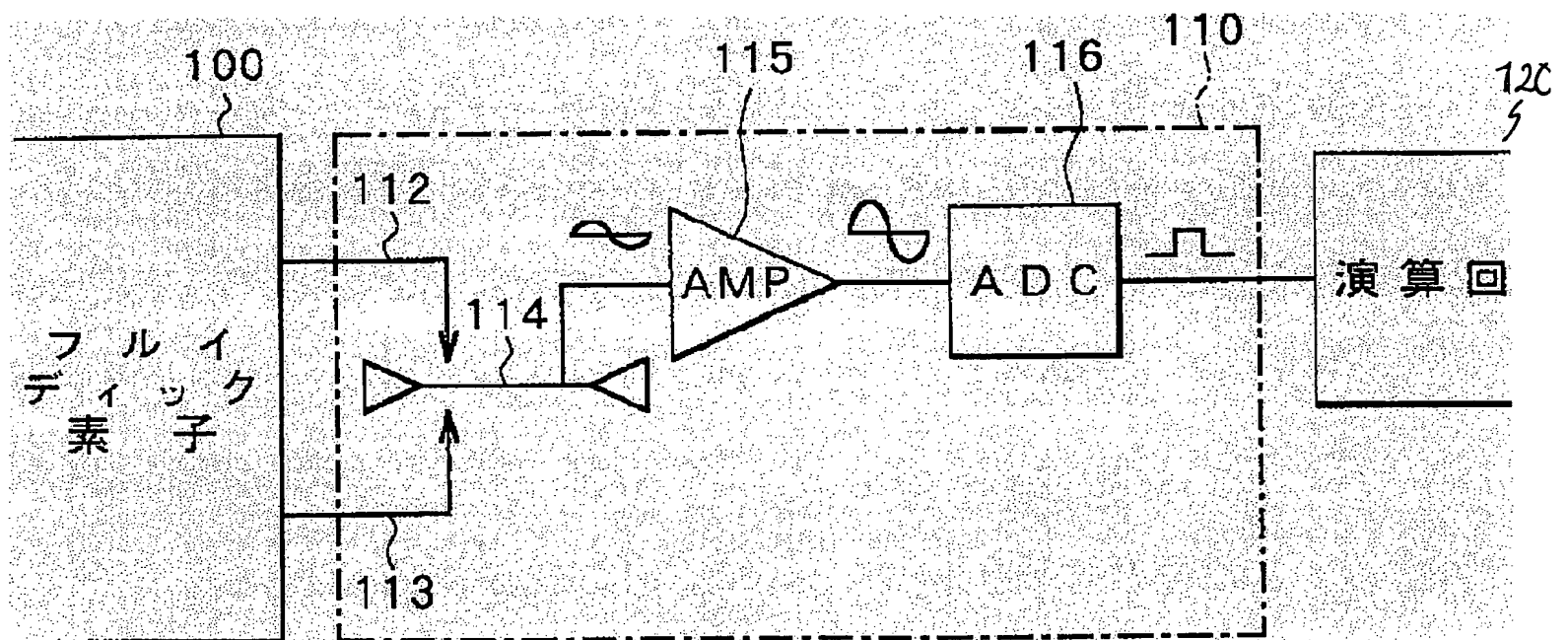






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